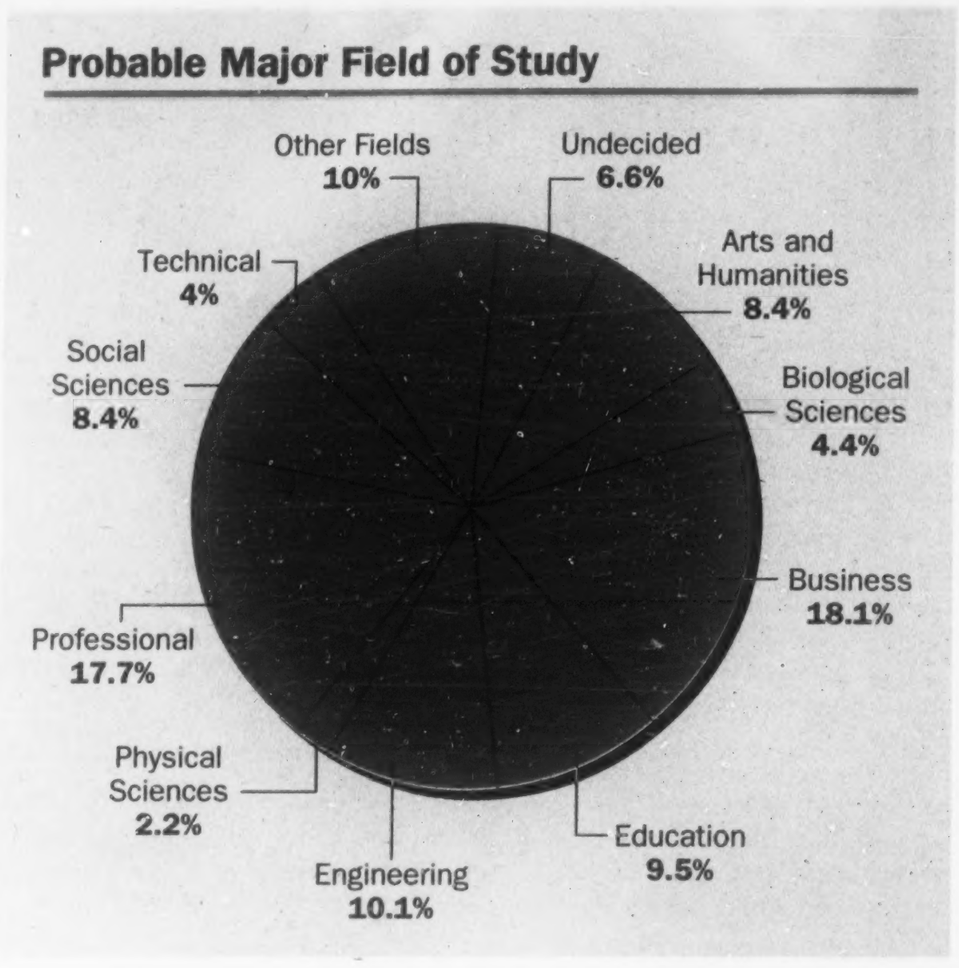


Fact File

This Year's College Freshmen: Attitudes and Characteristics

JACK PARDUE

Age on December 31, 1991

16 or younger	0.1%
17	2.0
18	66.4
19	23.6
20	2.6
21-24	2.3
25-29	1.3
30-39	1.3
40-54	0.4
55 or older	0.0

Racial and ethnic background

American Indian	1.5%
Asian-American	3.1
Black	9.2
White	83.4
Mexican-American	2.7
Puerto Rican-American	0.6
Other	1.9

Average grade in high school

A or A+	11.0%
A–	12.5
B+	18.3
B	24.4
B–	14.3
C+	12.2
C	7.0
D	0.4

Year of high-school graduation

1991	90.9%
1990	2.9
1989	0.9
1988 or earlier	3.4
High-school equivalency (GED test)	1.6
Never completed high school	0.3

Have had remedial work in:

English	6.5%
Reading	6.2
Mathematics	11.1
Social studies	4.6
Science	4.9
Foreign language	4.6

Current religious preference

Baptist	17.6%
Buddhist	0.3
Eastern Orthodox	0.4
Episcopal	2.1
Islamic	0.3
Jewish	1.5
Latter Day Saints	0.3
Lutheran	6.7
Methodist	8.8
Presbyterian	3.9
Quaker	0.3
Roman Catholic	33.1
Seventh-Day Adventist	0.3
United Church of Christ	2.1
Other Protestant	4.3
Other	5.5
None	12.3

Born-again Christian

Yes	29.0%
No	71.0

Disabilities

Hearing	0.9%
Speech	0.5
Orthopedic	1.2
Learning	2.2
Health-related	1.3
Partially sighted or blind	2.2
Other	1.6

Residence planned during fall term

With parents or relatives	29.1%
Other private home or apartment	8.2
College dormitory	59.6
Fraternity or sorority house	0.3
Other campus housing	1.7
Other	1.1

Miles from college to home

5 or less	7.4%
6 to 10	7.9
11 to 50	30.7
51 to 100	16.6%
101 to 500	28.5
501 or more	8.9

Father's occupation

Artist (including performer)	0.7%
Businessman	25.9
Member of clergy or religious worker	1.1
Engineer	7.7
Farmer or forester	4.0
Lawyer	1.5
Military career officer	2.2
Physician or dentist	1.9
Other health professional	1.2
Research scientist	0.5
Teacher or administrator, college	0.7
Teacher or administrator, elementary school	0.9
Teacher or administrator, secondary school	3.4
Worker, skilled	10.9
Worker, semi-skilled	4.9
Worker, unskilled	3.5
Other occupation	26.0
Unemployed	3.0

Father's education (highest level)

Grammar school or less	4.1%
Some high school	7.7
High-school diploma	28.2%
Postsecondary other than college	4.9
Some college	15.7
College degree	20.7
Some graduate school	2.4
Graduate degree	16.3

Mother's occupation

Artist (including performer)	1.3%
Businesswoman	13.7
Member of clergy or religious worker	0.2
Clerical worker	10.0
Engineer	0.3
Farmer or forester	0.6
Homemaker (full-time)	15.0
Lawyer	0.2
Nurse	8.0
Physician or dentist	0.4
Other health professional	1.9
Research scientist	0.1
Social, welfare, or recreation worker	1.6
Teacher or administrator, college	0.5
Teacher or administrator, elementary school	7.7
Teacher or administrator, secondary school	4.1
Worker, skilled	2.2
Worker, semi-skilled	2.8
Worker, unskilled	2.1
Other occupation	21.3
Unemployed	5.9

Mother's education (highest level)

Grammar school or less	2.9%
Some high school	6.2
High-school diploma	33.7
Postsecondary other than college	7.5
Some college	17.8
College degree	19.4
Some graduate school	2.7
Graduate degree	9.8

Status of parents

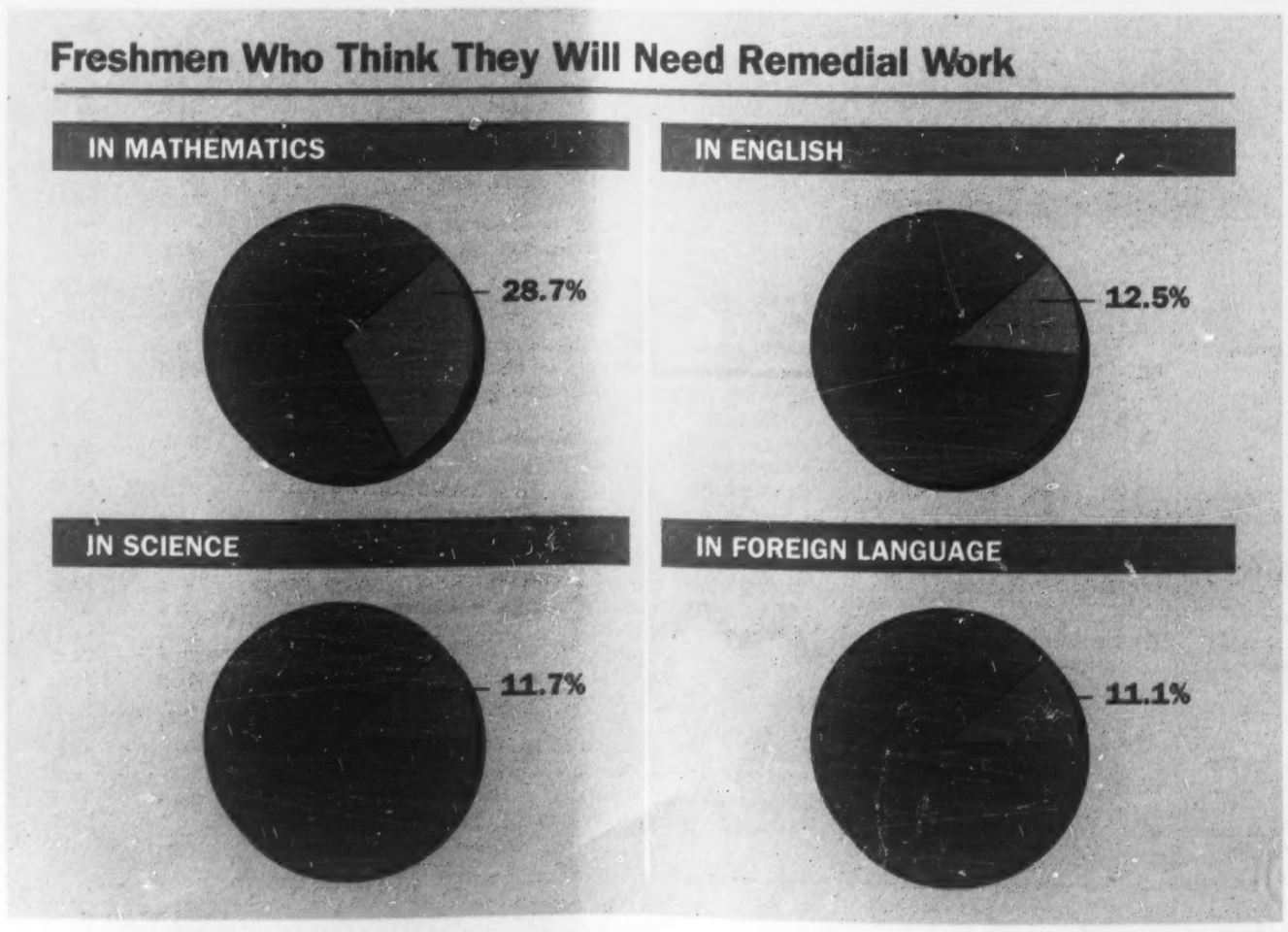
Living with each other	71.1%
Divorced or separated	23.6
One or both deceased	5.3

Students estimate chances are very good that they will:

Change major field	11.7%
Change career choice	11.1
Fail one or more courses	1.5
Graduate with honors	13.6
Be elected to student office	3.0
Get a job to pay college expenses	37.5
Work full-time while attending college	4.8
Join a social fraternity or sorority	16.3
Play varsity athletics	14.4
Be elected to an honor society	7.7
Make at least a B average	42.0
Need extra time to complete degree	8.5
Get tutoring in some courses	14.7
Work at outside job	23.2
Seek vocational counseling	4.6
Seek individual counseling on personal problems	3.7
Get bachelor's degree	64.0
Participate in student protests or demonstrations	5.9
Transfer to another college	13.0
Drop out permanently	0.8
Drop out temporarily	1.0
Be satisfied with college	51.1
Find job in preferred field	70.8
Marry while in college	6.6
Participate in volunteer or community-service work	14.6

Student rated self above average or in highest 10 per cent in:

Academic ability	52.3%
Artistic ability	24.2
Competitiveness	53.4
Cooperativeness	69.2
Drive to achieve	65.9
Emotional health	56.0
Leadership ability	49.7
Mathematical ability	36.4
Mechanical ability	27.2
Physical health	56.7
Popularity	40.7
Public speaking ability	28.3
Reading speed and comprehension	36.1
Self-confidence (intellectual)	51.3
Self-confidence (social)	45.8
Understanding of others	65.1
Writing ability	39.4



Number of other colleges applied to for admission this year

None	37.6%
One	14.7
Two	15.8
Three	13.7
Four	7.8
Five	4.7
Six or more	5.6

College attended is student's:

First choice	73.7%
Second choice	19.6
Third choice	4.3
Other	2.4

Reasons noted as very important in selecting college attended

Relatives' wishes	9.1%
Teachers' advice	4.3
Good academic reputation	51.6
Good social reputation	22.1
Offered financial assistance	27.8
Offered special education programs	22.2
Low tuition	27.7
Advice of guidance counselor	8.5
Wanted to live near home	21.3
Friend's suggestion	9.5
Recruited by college	3.9
Recruited by athletic department	5.0
Graduates go to top graduate schools	22.2
Graduates get good jobs	43.5
Religious affiliation of college	4.5
Size of college	35.0
Racial or ethnic makeup of student body	7.4
Not accepted anywhere else	2.2

Highest degree planned at college attended

None	4.4%
Vocational certificate	2.5
Associate (or equivalent)	26.1%
Bachelor's	48.7
Master's	12.8
Ph.D. or Ed.D.	1.8
M.D., D.O., D.D.S., or D.V.M.	1.2
LL.B. or J.D.	0.7
B.D. or M.Div.	0.2
Other	1.5

Highest degree planned anywhere

None	1.4%
Vocational certificate	1.8
Associate (or equivalent)	7.3
Bachelor's	28.2
Master's	35.5
Ph.D. or Ed.D.	12.5
M.D., D.O., D.D.S., or D.V.M.	6.9
LL.B. or J.D.	4.4
B.D. or M.Div.	0.3
Other	1.8

Probable career occupation

Accountant or actuary	4.7%
Actor or entertainer	0.9
Architect or urban planner	2.2
Artist	1.6
Business (clerical)	1.3
Business executive	7.3
Business proprietor	2.5
Business salesperson or buyer	1.1
Clergy (minister or priest)	0.2
Clergy (other)	0.1
Clinical psychologist	1.5
Computer programmer or analyst	2.4
Conservationist or forester	1.1
Dentist	0.5
Dietitian or home economist	0.2
Educator (college)	0.5
Educator (elementary)	5.2
Educator (secondary)	3.5
Engineer	9.0
Farmer or rancher	0.7
Foreign-service worker	0.7
Homemaker (full-time)	0.3
Interior decorator	0.4
Interpreter	0.2
Journalist or writer	1.9%
Lab technician or hygienist	0.6
Law-enforcement officer	1.9
Lawyer or judge	4.5
Military service	0.9
Musician	1.0
Nurse	5.2
Optometrist	0.3
Pharmacist	1.1
Physician	4.4
Research scientist	1.5
School counselor	0.4
School principal	0.1
Social, welfare, or recreation worker	1.2
Statistician	0.1
Therapist	3.4
Veterinarian	1.1
Skilled trades	1.8
Other occupation	9.5
Undecided	11.2

Estimated parental income

Less than $6,000	3.3%
$6,000-$9,999	3.3
$10,000-$14,999	5.3
$15,000-$19,999	5.3
$20,000-$24,999	6.7
$25,000-$29,999	7.2
$30,000-$39,999	14.0
$40,000-$49,999	13.7
$50,000-$59,999	11.9
$60,000-$74,999	11.4
$75,000-$99,999	8.0
$100,000-$149,999	5.0
$150,000-$199,999	2.1
$200,000 or more	2.8

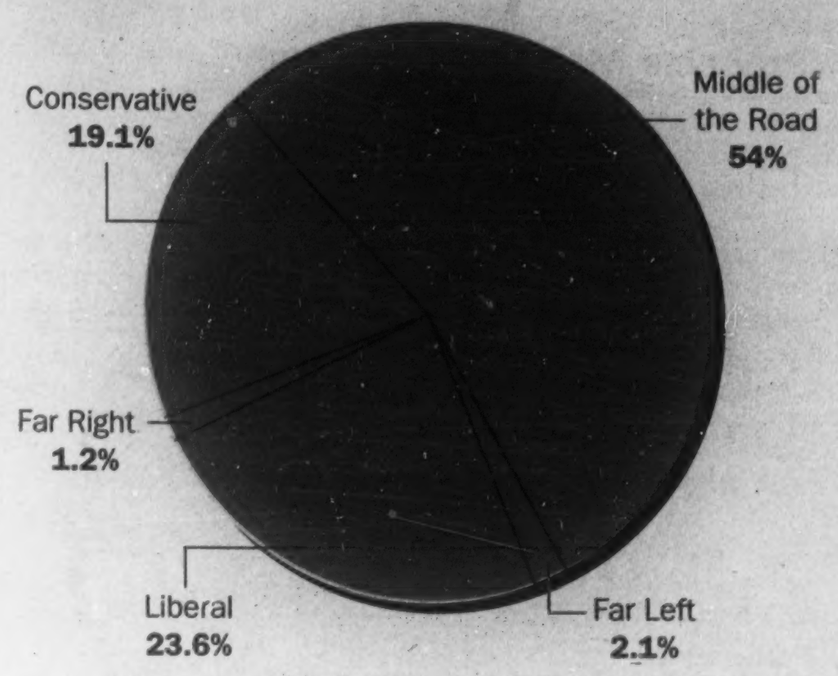
Received any aid from:

Parents, relatives, or friends	76.1%
Spouse	1.9
Savings from summer work	49.6
Other savings	28.5
Part-time job on campus	19.7
Part-time job off campus	23.7
Full-time job while in college	2.8
Pell Grant	23.2
Supplemental Educational Opportunity Grant	6.5%
State scholarship	13.4
College Work-Study	10.9
Other college grant	22.4
Other private grant	9.4
Other govt. aid (ROTC, GI, etc.)	2.6
Stafford Loan	22.1
Perkins Loan	6.9
Other college loan	5.2
Other loan	5.4
Other source	3.0

Received $1,500 or more from:

Parents, relatives, or friends	48.1%
Spouse	0.4
Savings from summer work	6.5%
Other savings	5.7
Part-time job on campus	1.5
Part-time job off campus	1.4
Full-time job while in college	0.7
Pell Grant	7.2
Supplemental Educational Opportunity Grant	1.4
State scholarship	3.7
College Work-Study	1.8
Other college grant	10.5
Other private grant	2.4
Other govt. aid (ROTC, GI, etc.)	1.5
Stafford Loan	13.1
Perkins Loan	1.8
Other college loan	2.9
Other loan	3.2
Other source	1.3

Political Views



Their Opinions, Activities, and Goals

	Total	Men	Women
Activities in the past year:			
Attended a religious service	82.7%	78.9%	86.1%
Was bored in class *	30.0	30.8	29.3
Participated in organized demonstrations	39.0	36.8	40.8
Failed to complete homework on time	65.6	70.9	61.0
Tutored another student	44.7	43.6	45.6
Did extra work or reading for a class *	10.6	8.8	12.1
Studied with other students	84.1	83.0	85.1
Was a guest in teacher's home	27.9	28.1	27.7
Smoked cigarettes *	11.3	10.4	12.1
Drank beer	57.3	63.8	51.6
Drank wine or liquor	56.8	54.8	58.6
Stayed up all night	78.8	79.9	77.9
Spoke a language other than English at home *	6.3	6.2	6.3
Felt overwhelmed by all I had to do *	20.2	13.3	26.2
Felt depressed *	8.9	6.1	11.3
Performed volunteer work	64.7	62.1	66.8
Came late to class	54.0	57.0	51.4
Played a musical instrument	37.2	34.8	39.4
Asked a teacher for advice after class *	18.6	16.3	20.6
Voted in a student election	78.0	77.6	78.4
Used a personal computer *	37.5	38.9	36.2
Typed a homework assignment *	31.1	28.8	33.0
Discussed politics *	20.5	23.9	17.6
Discussed sex *	31.5	35.8	27.9
Demonstrated for change in some military policy	9.2	10.2	8.3
Reasons noted as very important in deciding to go to college:			
Parents wanted me to go	33.7%	31.9%	35.2%
Could not find job	7.3	6.7	7.9
To get away from home	15.6	15.5	15.7
To be able to get a better job	78.6	77.7	79.4
To gain a general education and appreciation of ideas	60.7	53.5	66.9
To improve reading and study skills	37.4	32.6	41.6
Nothing better to do	2.8	3.4	2.3
To become a more cultured person	37.2	30.5	43.0
To be able to make more money	74.7	77.1	72.6
To learn more about things that interest me	73.2	69.4	76.4
To prepare for graduate or professional school	54.2	48.8	58.9
Agree strongly or somewhat that:			
Government is not doing enough to protect the consumer from faulty goods and services	69.1%	65.1%	72.6%
Government is not doing enough to control pollution	85.5	84.4	86.5
Taxes should be raised to reduce the federal deficit	25.5	29.3	22.2
There is too much concern in the courts for the rights of criminals	65.3	67.6	63.4

* Frequently only; all other activities frequently or occasionally.

	Total	Men	Women
Military spending should be increased	26.0%	28.1%	24.1%
Abortion should be legal	63.0	63.0	63.0
The death penalty should be abolished	21.1	18.8	23.2
It is all right for two people who really like each other to have sex even if they've known each other for a very short time	50.1	65.0	37.2
Married women's activities are best confined to home and family	26.0	31.9	20.8
Marijuana should be legalized	20.9	24.2	18.0
Busing to achieve racial balance in schools is all right	54.7	54.7	54.8
It is important to have laws prohibiting homosexual relationships	42.2	53.4	32.5
The chief benefit of college is that it increases one's earning power	71.0	75.2	67.3
Employers should be allowed to require employees or job applicants to take drug tests	80.8	79.1	82.3
The best way to control AIDS is through widespread, mandatory testing	66.4	66.3	66.5
Just because a man thinks that a woman has "led him on" does not entitle him to have sex with her	87.1	80.4	92.8
The government should do more to control the sale of handguns	78.1	66.8	87.8
A national health-care plan is needed to cover everybody's medical costs	75.8	72.1	79.0
Nuclear disarmament is attainable	63.7	64.8	62.7
Racial discrimination is no longer a major problem in America	20.3	22.8	18.0
The federal government should do more to discourage energy consumption	78.5	78.2	78.8
Realistically, an individual can do little to bring about changes in our society	31.3	35.0	28.0
Objectives considered essential or very important:			
Becoming accomplished in a performing art	10.1%	9.7%	10.5%
Becoming an authority in own field	67.6	69.4	66.1
Obtaining recognition from colleagues for contributions to field	53.2	53.9	52.6
Influencing the political structure	17.9	19.5	16.5
Influencing social values	39.6	33.6	44.7
Raising a family	67.7	66.4	68.9
Having administrative responsibility for the work of others	41.2	41.9	40.6
Being very well-off financially	73.7	77.3	70.5
Helping others who are in difficulty	60.3	50.2	68.9
Making a theoretical contribution to science	15.8	18.5	13.5
Writing original works	12.0	12.0	12.1
Creating artistic work	11.3	11.4	11.2
Becoming successful in own business	42.0	47.3	37.5
Becoming involved in programs to clean up environment	31.3	30.4	32.0
Developing a meaningful philosophy of life	43.2	41.6	44.6
Participating in a community-action program	23.5	19.9	26.6
Helping to promote racial understanding	33.7	29.9	36.8
Keeping up to date with political affairs	37.1	39.9	34.7

Number of hours per week in the last year spent on these activities

None:	
Studying or doing homework	1.7%
Socializing with friends	0.3
Talking with teachers outside of class	8.8
Exercising or sports	4.9
Partying	14.9
Working	26.8
Volunteer work	47.0
Student clubs or groups	29.2
Watching television	4.3
6 or more hours:	
Studying or doing homework	38.1%
Socializing with friends	77.1
Talking with teachers outside of class	5.6
Exercising or sports	48.2
Partying	33.3
Working	60.2
Volunteer work	6.5
Student clubs or groups	15.7
Watching television	34.1

High-school activities and awards

Was elected president of one or more student organizations	18.7%
Received a high rating in a state or regional music contest	10.5
Had a major part in a play	11.1
Won an award in an art competition	7.9
Took an SAT or ACT preparation course	35.4
Edited a school publication	11.4
Participated in course-related community-service projects	17.9
Won an award in a state or regional science contest	5.1
Was a member of a scholastic honor society	27.0

Note: The statistics are based on survey responses of 210,739 freshmen entering 431 two-year and four-year institutions in the fall of 1991. The figures were statistically adjusted to represent the total population of 1.6 million first-time, full-time freshmen. Because of rounding or multiple responses, figures may add to more than 100 per cent.

SOURCE: "THE AMERICAN FRESHMAN: NATIONAL NORMS FOR FALL 1991," BY ALEXANDER W. ASTIN, PUBLISHED BY AMERICAN COUNCIL ON EDUCATION AND UNIVERSITY OF CALIFORNIA AT LOS ANGELES

More Freshmen Choose Colleges Based on Costs, Study Finds

Continued From Page A33

cost less this academic year. Admissions officials have said that the stagnant economy made students and their parents more price-conscious and prompted some of the more expensive private colleges to offer more scholarships.

The survey, which has been conducted annually for the past 25 years, questioned students on a wide range of personal and academic issues. It also found:

■ Students make far greater use of their personal computers than they have in the past. The number who said they frequently used personal computers increased to 37 per cent in 1991, up from 28 per cent in 1989.

■ More students have completed remedial work in high school or will need such work in college. For example, 12 per cent of the students questioned in 1991 said they expected to need remedial help in English, compared with 10 per cent of the students in 1990.

■ High-school students had had less interaction with teachers outside the classroom than in previous years. The proportion of students who reported they had visited a high-school teacher's home was at an all-time low of 28 per cent.

■ Students' interest in business declined for the fourth year in a row. In 1991, only 15.6 per cent of the freshmen surveyed said they wanted to major in business, compared with 27 per cent in 1987, the peak year. By contrast, interest in the health professions is rising. Thirteen per cent of the students said they wanted to major in the health professions, up from 7 per cent in 1987. And after years of declining interest, more students expressed interest in nursing careers: 5 per cent of those surveyed in 1991, compared with a low of 2 per cent in 1987.

"These figures suggest that neither financial aid nor personal or family resources are keeping pace with the costs of attending college"

■ The proportion of students who call themselves politically liberal increased slightly for the second straight year, to 26 per cent. The proportion of those who call themselves conservative declined to 20 per cent, down from 22 per cent in 1989. The report said that the figures did not reflect the "widespread claim of growing conservatism" among students.

■ Eighty-seven per cent of those surveyed agreed with the statement, "Just because a man thinks a woman 'has led him on' does not entitle him to have sex with her." Eighty-three per cent agreed with the statement when the question was first asked in 1987.

Copies of the report on the survey, "The American Freshman: National Norms for Fall 1991," are available for $20 each from the Higher Education Research Institute, UCLA Graduate School of Education, 405 Hilgard Avenue, Los Angeles 90024. ■

U.S. Projections of Enrollment Revised Upward

Continued From Page A1

and older. Such students will account for 23 per cent of the enrollment in 2002, up from 19 per cent in 1990. The share of enrollment of those under age 25 will remain at about 57 per cent over the period, while the proportion of those from the ages of 25 to 34 will drop to 20 per cent from 25 per cent.

The number of new high-school graduates is expected to remain stable at about 2.4 million a year over the next several years. Beginning in 1995, the number of graduates will rise, leveling off at about 2.9 million from 1999 to 2002.

Following the pattern of enrollment increases, the number of academic degrees awarded annually by colleges is expected to rise steadily throughout the next decade. From 1991 to 2001, the number of associate degrees awarded will rise 15 per cent, to 539,000; bachelor's degrees will increase 12 per cent, to 1.2 million; and doctoral degrees will increase 7 per cent, to 41,400.

SUSAN MUNIAK FOR THE CHRONICLE

Elaine El-Khawas: "Jobs for high-school graduates have dried up, and college training has become the new minimum."

Copies of the department's 218-page forecast, "Projections of Education Statistics to 2002," are available for $12 each from the Superintendent of Documents, U.S. Government Printing Office, Mail Stop SSOP, Washington 20402-9328. Request stock number 065-000-00473-9. ■

FACT FILE: Projections of College Enrollment, Degrees and High-School Graduates, 1991 to 2002

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
College enrollment												
Total	14,105,000	14,235,000	14,366,000	14,512,000	14,621,000	14,803,000	14,978,000	15,227,000	15,462,000	15,692,000	15,865,000	16,030,000
Men	6,473,000	6,516,000	6,531,000	6,549,000	6,575,000	6,647,000	6,691,000	6,774,000	6,853,000	6,922,000	6,991,000	7,052,000
Women	7,632,000	7,719,000	7,835,000	7,963,000	8,046,000	8,156,000	8,287,000	8,453,000	8,609,000	8,770,000	8,874,000	8,978,000
Public	10,982,000	11,083,000	11,187,000	11,305,000	11,393,000	11,537,000	11,673,000	11,864,000	12,043,000	12,220,000	12,355,000	12,478,000
Private	3,123,000	3,152,000	3,179,000	3,207,000	3,228,000	3,266,000	3,305,000	3,363,000	3,419,000	3,472,000	3,510,000	3,552,000
Full-time	7,844,000	7,871,000	7,895,000	7,949,000	7,988,000	8,095,000	8,212,000	8,408,000	8,588,000	8,770,000	8,906,000	9,035,000
Part-time	6,261,000	6,364,000	6,471,000	6,563,000	6,633,000	6,708,000	6,766,000	6,819,000	6,874,000	6,922,000	6,959,000	6,995,000
Full-time-equivalent *	10,106,000	10,171,000	10,232,000	10,321,000	10,385,000	10,519,000	10,656,000	10,871,000	11,070,000	11,270,000	11,418,000	11,561,000
Four-year institutions												
Total	8,844,000	8,923,000	8,990,000	9,066,000	9,120,000	9,227,000	9,334,000	9,500,000	9,655,000	9,810,000	9,927,000	10,041,000
Public	5,993,000	6,045,000	6,088,000	6,139,000	6,175,000	6,247,000	6,320,000	6,434,000	6,539,000	6,646,000	6,727,000	6,803,000
Private	2,851,000	2,878,000	2,902,000	2,927,000	2,945,000	2,980,000	3,014,000	3,066,000	3,116,000	3,164,000	3,200,000	3,238,000
Two-year institutions												
Total	5,261,000	5,312,000	5,376,000	5,446,000	5,501,000	5,576,000	5,644,000	5,727,000	5,807,000	5,882,000	5,938,000	5,989,000
Public	4,989,000	5,038,000	5,099,000	5,166,000	5,218,000	5,290,000	5,353,000	5,430,000	5,504,000	5,574,000	5,628,000	5,675,000
Private	272,000	274,000	277,000	280,000	283,000	286,000	291,000	297,000	303,000	308,000	310,000	314,000
Undergraduate												
Total	12,084,000	12,165,000	12,247,000	12,356,000	12,449,000	12,610,000	12,768,000	12,998,000	13,216,000	13,436,000	13,598,000	13,748,000
Public	9,747,000	9,818,000	9,892,000	9,987,000	10,065,000	10,196,000	10,322,000	10,501,000	10,670,000	10,841,000	10,969,000	11,084,000
Private	2,337,000	2,347,000	2,355,000	2,369,000	2,384,000	2,414,000	2,446,000	2,497,000	2,546,000	2,595,000	2,629,000	2,664,000
Graduate												
Total	1,712,000	1,752,000	1,793,000	1,826,000	1,842,000	1,859,000	1,872,000	1,888,000	1,901,000	1,908,000	1,915,000	1,926,000
Public	1,108,000	1,134,000	1,160,000	1,182,000	1,192,000	1,204,000	1,212,000	1,223,000	1,231,000	1,236,000	1,241,000	1,248,000
Private	604,000	618,000	633,000	644,000	650,000	655,000	660,000	665,000	670,000	672,000	674,000	678,000
Professional												
Total	309,000	318,000	326,000	330,000	330,000	334,000	338,000	341,000	345,000	348,000	352,000	356,000
Public	127,000	131,000	135,000	136,000	136,000	137,000	139,000	140,000	142,000	143,000	145,000	146,000
Private	182,000	187,000	191,000	194,000	194,000	197,000	199,000	201,000	203,000	205,000	207,000	210,000
Degrees												
Associate												
Total	470,000	477,000	476,000	478,000	480,000	487,000	491,000	500,000	507,000	519,000	529,000	539,000
Men	200,000	205,000	204,000	204,000	203,000	204,000	205,000	208,000	209,000	213,000	216,000	219,000
Women	270,000	272,000	272,000	274,000	277,000	283,000	286,000	292,000	298,000	306,000	313,000	320,000
Bachelor's												
Total	1,064,000	1,081,000	1,101,000	1,100,000	1,100,000	1,098,000	1,100,000	1,102,000	1,114,000	1,129,000	1,164,000	1,189,000
Men	492,000	495,000	514,000	511,000	510,000	507,000	505,000	503,000	507,000	509,000	523,000	528,000
Women	572,000	586,000	587,000	589,000	590,000	591,000	595,000	599,000	607,000	620,000	641,000	661,000
Master's												
Total	327,000	338,000	343,000	350,000	354,000	354,000	355,000	357,000	362,000	368,000	376,000	383,000
Men	150,000	157,000	159,000	162,000	165,000	164,000	164,000	165,000	168,000	173,000	179,000	184,000
Women	177,000	181,000	184,000	188,000	189,000	190,000	191,000	192,000	194,000	195,000	197,000	199,000
Doctorate												
Total	38,700	39,300	39,800	40,000	40,200	40,400	40,600	40,900	41,100	41,200	41,400	41,400
Men	24,200	24,300	24,400	24,100	23,800	23,600	23,400	23,300	23,200	22,900	22,700	22,400
Women	14,500	15,000	15,400	15,900	16,400	16,800	17,200	17,600	17,900	18,300	18,700	19,000
First-professional												
Total	73,800	80,100	82,600	85,500	87,800	88,100	88,100	89,100	90,900	92,200	92,900	94,400
Men	44,200	49,000	50,400	51,500	52,500	52,800	52,800	53,500	54,600	55,300	56,000	57,000
Women	29,600	31,100	32,200	34,000	35,300	35,300	35,300	35,600	36,300	36,900	36,900	37,400
High-school graduates												
Total	2,465,000	2,446,000	2,470,000	2,464,000	2,563,000	2,615,000	2,719,000	2,831,000	2,885,000	2,932,000	2,943,000	2,882,000
Public	2,210,000	2,193,000	2,215,000	2,209,000	2,298,000	2,345,000	2,438,000	2,538,000	2,587,000	2,629,000	2,639,000	2,584,000
Private	255,000	253,000	255,000	255,000	265,000	270,000	281,000	293,000	298,000	303,000	304,000	298,000

Note: Details may not add to totals because of rounding.
* Estimate based on full-time enrollment plus the full-time equivalent of part-time enrollment as reported by institutions

SOURCE: U.S. DEPARTMENT OF EDUCATION

Minority-Group Rolls Rise 10%, Reaching a Record Level

Continued From Page A33

of American Indian and Asian students are not available.

Minority students were more likely than whites to be enrolled in undergraduate programs, according to the department report. Among minority students, 91.2 per cent were undergraduates and 8.8 per cent were graduate and professional-school students. For white students, the comparable figures were 86.5 per cent and 13.5 per cent.

Black and white students selected public institutions over private ones at the same rate, with about 78 per cent of each group attending public colleges in 1990. The representation of students of other racial and ethnic backgrounds in public colleges was higher, with such institutions attracting 87 per cent of American Indians, 86 per cent of Hispanics, and 80 per cent of Asians.

"We cannot allow attempts to balance federal and state budgets to eradicate efforts on behalf of minorities."

Following the pattern of the 1980's, minority students were more likely than white students to enroll at two-year colleges. In 1990, 45 per cent of minority and 37 per cent of white students attended two-year institutions.

Citing technical problems with the 1990 survey, the department urged that caution be used in interpreting data for public two-year institutions. Because of incomplete responses from such colleges in California, Florida, Hawaii, Indiana, and South Dakota, the department estimated the distribution of enrollment by race and ethnicity for about one-third of community-college enrollments. The department typically applied the 1988 distribution to the 1990 figures on total enrollment.

Progress 'Uneven at Best'

The Education Department statistics cover students enrolled in the 50 states and the District of Columbia, and exclude those in Puerto Rico and other outlying areas.

The American Council on Education's annual report included a special section on racial and ethnic employment trends in colleges and universities.

Minority progress in college employment has been "uneven at best," the report said, with American Indians, blacks, Hispanics, and U.S.-born Asians "severely underrepresented" on most college faculties. In 1989, about 11.5 per cent of full-time faculty members were members of minority groups, up from 9 per cent a decade earlier.

Efforts 'Still Much Needed'

The share of minority faculty members with tenure remained stable during the 1980's at about 60 per cent, while the proportion of white faculty members with tenure went up three percentage points, to 72 per cent.

From 1979 to 1989, the proportion of full-time college workers who were minority-group members rose from 18 per cent to 20 per cent. However, American Indians, blacks, and Hispanics were more likely than white men to hold non-faculty and non-managerial jobs.

"Affirmative and targeted efforts are still much needed, and, in fact, must be strengthened during the 1990's if higher education is to increase the representation of people of color in faculty and leadership positions," the council said in its report.

The council called on colleges to work to increase the number of minority Ph.D. recipients, to make the faculty hiring process more fair, and to insure that once hired, minority faculty members are "supported and mentored to achieve success in teaching, research and publication."

Copies of the American Council on Education study, "The Tenth Annual Status Report on Minorities in Higher Education," are available for $10.50, prepaid, from ACE, Publications Department, One Dupont Circle, Washington 20036.

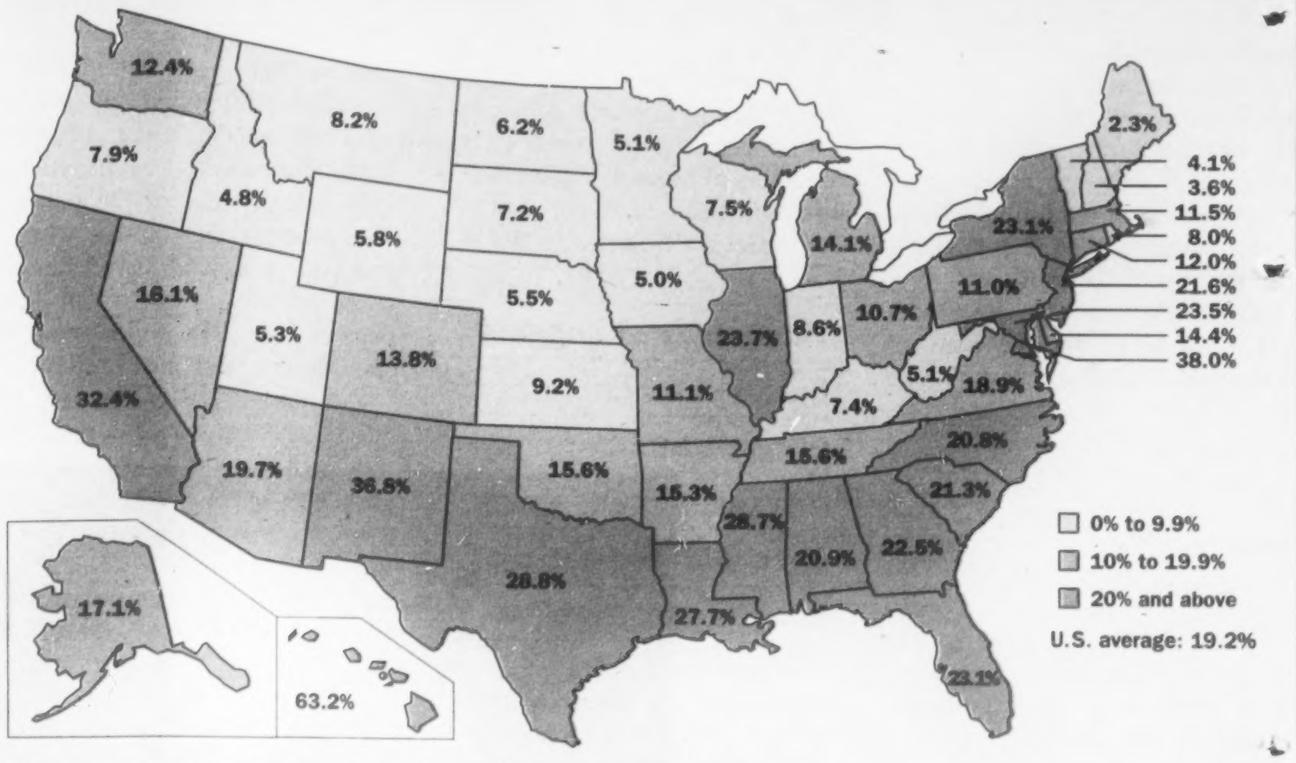
Copies of the U.S. Department of Education report, "Trends in Racial / Ethnic Enrollment in Higher Education: Fall 1980 through Fall 1990," are available free of charge from the U.S. Department of Education, Office of Educational Research and Improvement, Education Information Branch, Room 300, 555 New Jersey Avenue, N.W., Washington 20208-5641; (800) 424-1616. ■

1990 Enrollment by Racial and Ethnic Group
(In thousands)

	American Indian	Asian	Black	Hispanic	White	Foreign
Total	103	555	1,223	758	10,675	397
Public	90	445	952	648	8,340	265
Private	12	109	271	110	2,335	132
Men	43	287	476	344	4,841	248
Women	60	268	747	414	5,834	149
Four-year	48	343	715	344	6,757	322
Two-year	54	212	509	414	3,918	75
Undergraduate	95	485	1,124	702	9,231	226
Graduate	6	52	84	46	1,221	165
Professional	1	18	16	10	222	5

SOURCE: U.S. DEPARTMENT OF EDUCATION

FACT FILE: State-by-State Enrollment by Race, 1990



The map shows the proportion of enrollments in each state comprising American Indian, Asian, black, and Hispanic students.

	Total	American Indian	Asian	Black	Hispanic	White	Foreign
Alabama	247,117	591	1,699	48,180	1,138	190,920	4,589
Alaska	29,833	2,648	740	1,079	634	24,264	468
Arizona	264,735	8,845	6,116	7,585	29,618	205,676	6,895
Arkansas	90,425	438	740	12,188	431	75,157	1,471
California *	1,771,746	21,005	215,416	114,804	222,749	1,131,741	66,031
Colorado	231,547	2,315	5,417	6,943	17,319	194,943	4,610
Connecticut	169,480	433	4,362	9,952	5,648	144,265	4,820
Delaware	42,004	99	710	4,710	546	35,155	784
D.C.	80,669	270	3,222	24,770	2,406	40,977	9,024
Florida *	538,389	1,616	10,871	53,400	58,490	397,880	16,132
Georgia	251,810	548	4,241	49,199	2,740	189,189	5,893
Hawaii *	53,772	162	31,356	1,457	1,002	16,132	3,663
Idaho	51,881	485	706	310	1,004	48,024	1,352
Illinois	729,246	2,245	32,353	89,218	48,932	541,347	15,151
Indiana *	283,015	720	3,913	15,323	4,380	251,389	7,290
Iowa	170,515	441	2,430	4,044	1,587	155,204	6,809
Kansas	163,478	1,969	2,717	6,798	3,538	143,116	5,340
Kentucky	177,852	506	1,343	10,491	738	162,549	2,225
Louisiana	186,599	856	2,683	44,738	3,448	130,361	4,513
Maine	57,186	398	418	296	195	55,487	392
Maryland	264,862	852	11,694	44,582	5,026	195,079	7,629
Massachusetts	418,874	1,220	16,144	18,376	12,501	349,516	21,117
Michigan	569,803	3,547	10,693	56,786	9,094	475,505	14,178
Minnesota	253,789	2,002	4,948	4,143	1,936	235,231	5,529
Mississippi	122,883	377	783	33,699	395	85,699	1,930
Missouri	289,407	1,132	4,487	23,050	3,434	250,758	6,546
Montana	35,876	2,427	120	114	280	32,200	735
Nebraska	112,831	729	1,178	2,723	1,559	104,620	2,022
Nevada	61,728	1,043	2,559	2,931	3,408	50,910	877
New Hampshire	59,510	229	760	669	490	56,522	840
New Jersey	323,947	776	14,340	33,113	21,642	241,666	12,410
New Mexico	85,596	4,596	1,125	2,176	23,635	52,573	1,491
New York	1,040,484	3,914	49,171	112,173	74,835	753,074	47,317
North Carolina	351,990	3,082	5,622	62,032	2,528	273,874	4,852
North Dakota	37,878	1,616	285	246	195	34,380	1,156
Ohio	555,702	1,422	7,356	45,270	5,467	482,201	13,986
Oklahoma	173,221	9,609	2,904	11,816	2,635	140,865	5,392
Oregon	166,641	1,694	6,321	2,153	2,990	145,797	7,686
Pennsylvania	604,060	1,011	13,588	44,009	7,709	523,157	14,586
Rhode Island	78,273	222	1,891	2,558	1,606	69,974	2,022
South Carolina	159,302	334	1,494	31,177	911	122,964	2,422
South Dakota *	34,208	1,912	198	250	94	31,106	648
Tennessee	226,238	476	2,283	31,240	1,302	186,541	4,396
Texas	901,437	3,006	27,907	80,458	148,296	617,626	24,144
Utah	121,303	1,322	2,243	661	2,233	110,150	4,694
Vermont	36,398	131	569	375	428	34,178	717
Virginia	353,442	860	11,400	49,566	4,803	280,786	6,027
Washington	263,278	3,854	15,424	7,361	6,122	225,213	5,304
West Virginia	84,790	139	688	3,160	360	78,795	1,648
Wisconsin	299,774	2,050	4,991	10,667	4,692	271,096	6,278
Wyoming	31,326	444	184	284	905	28,952	557
Total	13,710,150	102,618	554,803	1,223,303	758,054	10,674,784	396,588

*High proportions of enrollment figures for public two-year institutions were imputed based on 1988 data because institutions did not provide complete statistics on 1990 enrollment.

SOURCE: U.S. DEPARTMENT OF EDUCATION

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Quote, Unquote

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"A $50,000 penalty gets people's attention."
A director of services for students with disabilities, on federal rules taking effect this week: A1

"Colleges are just now starting to try to catch up with what most of the corporate sector has been doing for a number of years."
A health-care consultant: A1

"The academic world has shut its doors on the murder of John Kennedy. They think it's beneath them."
A historian who uses the collections of the Assassination Archives and Research Center: A5

"I work for a wonderful agency that does marvelous things I cannot tell you about."
A mathematician who works for the National Security Agency: A17

"This has been a terrible waste."
A college president on a U.S. antitrust investigation: A25

"We spend so much time talking about problems, it's impossible to talk about solutions."
A student in a freshman seminar: A33

"High-school graduates usually get just one chance at college. If we don't offer the most talented among them a first-rate public education, everybody—they themselves and the society that needs them—loses out."
A professor of English at the University of Massachusetts: A48

"Most writers who can't teach are like the centipede who, when asked which foot it moved first, thought about it a moment or two, couldn't figure it out, and became paralyzed."
A novelist on teaching writing: B3

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MANY LAWSUITS POSSIBLE

New Federal Regulations on Rights of the Handicapped May Force Colleges to Provide Better Access to Technology

By DAVID L. WILSON

Disabled students and faculty members say that federal regulations that take effect this week will provide a powerful new tool to compel colleges and universities to give the handicapped better access to campus computers and other technology.

The vast majority of colleges are not up to speed in providing the kind of technology that allows handicapped people to participate fully in higher education, computer experts say. The new regulations are expected to spur disabled students to sue institutions that they believe have failed to provide access.

'You'd Better Pay Attention'

Many institutions are unclear about the changes they must make. Computer experts believe that although the new rules are not fundamentally different from those that have been on the books for nearly two decades, the publicity surrounding them will force many campuses to spend more time and money devising systems that suit handicapped people's needs.

"Members of the disability community will be more likely to exercise their rights than they have heretofore," says Bob Silverstein, staff director and chief counsel for the Senate Labor and Human Resources Subcommittee on Disability Policy. To colleges that have failed to follow existing regulations and eliminate barriers for the handicapped, he says: "If you haven't paid attention before, you'd better pay attention now."

About 10.5 per cent of all college students have some dis-

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MICHAEL VAUGHN FOR THE CHRONICLE

Sophomore Andrea D. Dutton: She feels "cheated" because many computers at Purdue are inaccessible to her.

Tying Student Loans to National Service Gets Campaign Spur

By GOLDIE BLUMENSTYK

The idea of linking student loans and national service is gaining new visibility in the Presidential campaign—and new scrutiny from critics.

Gov. Bill Clinton of Arkansas, a leading candidate for the Democratic nomination, has made national service a major part of his platform.

He would replace the existing federally subsidized student-loan system with a government trust fund. Students could borrow money for college and then repay it either as a proportion of their income over time, or by working for two or three years as teachers, police officers, child-care workers, or in other public-sector fields.

"We could revolutionize the social landscape of America," Mr. Clinton says, describing the impact of his "domestic GI Bill."

For many college officials and students, Governor Clinton's proposal is far more attractive than a national-service proposal

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More Colleges Tighten Benefit Programs to Meet Big Rise in Health-Insurance Costs

By DENISE K. MAGNER

The soaring cost of employee benefits, combined with a bleak fiscal outlook, is prompting many colleges to reexamine and tighten their benefits packages.

Most of the changes involve health-care benefits. Nationally, health-care costs continue to rise much faster than the rate of inflation, and colleges have not been immune. Some institutions report their costs for providing health benefits have jumped by as much as 20 to 30 per cent annually.

As a result of that trend and a broader fiscal crunch that has led to layoffs on some campuses, changes are being made in the benefits arena. More colleges are requiring employees to foot a larger share of the bill for health insurance. They are offering new health plans that limit their employees' choice of doctors and manage more closely the care they receive. Some are considering whether, and how, to limit medical benefits for retirees. And a growing number have been using early-retirement incentives as a tool to reduce their work force.

"I'm not hearing of any universities adding any new benefits," said Judith T. Muñoz, director of human resources at the University of San Diego and benefits adviser for the College and University Personnel Association. "We're all trying to do things to control costs."

Pressure Intensifies

She and other personnel managers in higher education say the need to control further the cost of employee benefits has intensified amid today's heightened financial pressures.

"Colleges need to look at the particulars of their benefits plans to see if they represent what a college would do if it created that program today," said Robert M. Wilson, who retired last month as vice-president for personnel at the Johns Hopkins University. He is now an adviser to the Washington office of Foster Higgins & Co., a benefits consulting firm.

He added: "They need to see if the shar-

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Fund Raising by Public Colleges: Will Legislators Cut Support?

As public colleges show how well they can generate private contributions, even their own officials are concerned about the financial ramifications.

STORY ON PAGE A31